

Examiner's Amendment

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such amendment, it must be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's amendment was given in a telephone interview with Ben P. Tabor (Reg. No.60,741) on September 3, 2009.

3. The application has been amended as follows:

- Paragraph [0081] has been amended to better define machine readable storage media and direct the claim language to statutory subject matter within the meanings of 101, with respect to claims 20-31.
- Claims 20-31 have been replaced with the following amended claims

Specification: (*Paragraph [0081], pages 30-31*)

[0081] Referring now to FIG. 14, one possible embodiment of a carrier virtual network system manager 1450 is illustrated. The carrier virtual network system manager 1450 includes a means 1455 for maintaining information regarding layer one resources dedicated to a carrier virtual network. Means 1455 may comprise a suitable data base, electronic records, or other suitable means for maintaining and, optionally, updating information regarding the identity of portions of layer one resources dedicated to a carrier virtual network. Means 1455 may also retain information regarding participating telecommunication networks, particularly as to which participating telecommunication networks may access which carrier virtual networks maintained by the carrier virtual

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network system manager 1450. Means 1455 may be any type of computer readable or machine readable media with instructions to perform the method illustrated and described herein. This method can be implemented as a computer program embodied on a machine readable media, which includes a machine readable storage media (e.g. a computer memory, CD-ROM, a floppy diskette, hard disk drive or any type of media suitable for storing electronic instructions) as a combination of software and hardware.

One suitable use of machine readable media is the use of Java programming language in conjunction with a Unix or Linux server to create appropriate computer software.

Claims :

20. **(Currently Amended)** At least one machine readable storage media containing machine readable code embodied thereon that, when executed by a computer, causes for causing a carrier virtual network system to perform a method for establishing a telecommunication connection through a carrier virtual network within the service level latency requirements of a telecommunication service order, the method comprising:

maintaining a database of connection information that describes the layer one resources available to the carrier virtual network, wherein the available layer one resources are dedicated to the carrier virtual network by a plurality of dedicating telecommunication networks, wherein the carrier virtual network is accessible by at least one accessing telecommunication network, wherein the plurality of dedicating telecommunication networks and the at least one accessing telecommunication network each represent particular telecommunication networks of layer one resources exclusive from the others and owned by a respective service provider;

maintaining a database of latency information for the layer one resources available to the carrier virtual network;

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receiving connection information for the layer one resources available to the carrier virtual network into the database of connection information;

receiving latency information for the layer one resources available to the carrier virtual network into the database of latency information;

utilizing the computer to identify connections using layer one resources available to the carrier virtual network that would fulfill the telecommunication service order using the database of connection information;

determining which of the identified connections meet the latency requirements of the telecommunication service order using the database of latency information; and

provisioning an identified connection that meets the latency requirements of the telecommunication service order.

21. **(Currently Amended)** The at least one machine readable storage media of claim 20, wherein maintaining a database of connection information regarding the layer one resources available to the carrier virtual network comprises:

maintaining connection information for the layer one resources dedicated to the carrier virtual network from the plurality of dedicating telecommunication networks; and

updating the connection information for the layer one resources dedicated to the carrier virtual network when new connection information is received.

22. **(Currently Amended)** The at least one machine readable storage media of claim 21, wherein maintaining a database of connection information regarding the layer one resources available to the carrier virtual network further comprises:

maintaining connection information for the layer one resources of the accessing telecommunication network; and

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updating the connection information for the layer one resources of the accessing telecommunication network when new connection information is received.

23. **(Currently Amended)** The at least one machine readable storage media of claim 21, wherein maintaining a database of latency information for the layer one resources available to the carrier virtual network comprises:

maintaining latency information for the layer one resources dedicated to the carrier virtual network from the plurality of dedicating telecommunication networks; and

updating the latency information for the layer one resources dedicated to the carrier virtual network when new latency information is received.

24. **(Currently Amended)** The at least one machine readable storage media of claim 23, wherein maintaining a database of connection information for the layer one resources available to the carrier virtual network further comprises:

maintaining connection information regarding the network connections between the layer one resources of the accessing telecommunication network and the layer one resources dedicated to the carrier virtual network from the plurality of dedicating telecommunication networks.

25. **(Currently Amended)** The at least one machine readable storage media of claim 24, wherein maintaining a database of latency information for the layer one resources available to the carrier virtual network further comprises:

maintaining latency information for network connections between the layer one resources of the accessing telecommunication network and the layer one resources

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dedicated to the carrier virtual network from the plurality of dedicating telecommunication networks.

26. **(Currently Amended)** The at least one machine readable storage media of claim 25, the method further comprising:

receiving notice if a provisioned connection is impaired; identifying alternative connections using the layer one resources available to the carrier virtual network that would fulfill the telecommunication service order using the database of connection information;

determining which of the identified alternative connections meet the service level latency requirements of the telecommunication service order using the database of latency information; and

re-provisioning the impaired connection to one of the identified alternative connections that meet the service level latency requirements of the telecommunication service order.

27. **(Currently Amended)** The at least one machine readable storage media of claim 26, wherein identifying alternative connections occurs prior to provisioning an identified connection.

28. **(Currently Amended)** The at least one machine readable storage media of claim 27, wherein determining which of the identified alternative connections meet the latency requirements occurs prior to provisioning an identified connection.

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29. **(Currently Amended)** The at least one machine readable storage media of claim 26, wherein identifying alternative connections occurs simultaneous with identifying connections.

30. **(Currently Amended)** The at least one machine readable storage media of claim 29, wherein determining which of the identified alternative connections meet the latency requirements occurs simultaneous with determining which of the identified connections meet the latency requirements.

31. **(Currently Amended)** The at least one machine readable storage media of claim 20, the method further comprising:

receiving notice if a provisioned connection is impaired;

identifying alternative connections using the layer one resources available to the carrier virtual network that would fulfill the telecommunication service order using the database of connection information;

determining which of the identified alternative connections meet the service level latency requirements of the telecommunication service order using the database of latency information; and

re-provisioning the impaired connection to one of the identified alternative connections that meet the service level latency requirements of the telecommunication service order.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Wasel whose telephone number is (571) 272-2669. The examiner can normally be reached on Mon-Fri (8:00 am - 5:00 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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September 4, 2009

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